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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,567	07/21/2003	J. Michael Joseph	051252-5244	4801

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SIEMENS CORPORATION
INTELLECTUAL PROPERTY DEPARTMENT
170 WOOD AVENUE SOUTH
ISELIN, NJ 08830

EXAMINER

KIM, CHRISTOPHER S

ART UNIT	PAPER NUMBER
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3752

MAIL DATE	DELIVERY MODE
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01/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/622,567

Applicant(s)

JOSEPH, J. MICHAEL

Examiner

Christopher S. Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6,7,9,10 and 12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6,7,9,10 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The response filed September 5, 2007 is acknowledged.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Election/Restrictions

3. Applicant elected Group I, Species A (Figures 1-2) in the reply filed on June 12, 2007.

Claim Rejections - 35 USC § 112

4. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 7 recite "...the wall extending at a first oblique angle with respect to the first surface, and the first angle varying..." In the recitation "a first oblique angle," the term itself defines a particular angle. It is uncertain how "a first oblique angle" (singular) angle varies (plural). If the wall varies, it must be defined by multiple oblique angles. Claims 4 and 10 contain similar recitations.

Claims 2 and 8 recite "...the perimeter lying in a plane that is orthogonal with respect to the axis and this is oblique with respect to the first surface." The disclosure

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appears to teach a first surface 20 that is orthogonal to longitudinal axis. It is uncertain how the perimeter can be orthogonal to the longitudinal axis and be oblique to the first surface.

Claims 6 and 12 recite "...the second angle varies..." The second angle is defined by a cylinder. It is uncertain how a cylindrical wall angle can vary. The cylindrical wall, in a completely finished plate, is constant in position relative to the first surface, second surface and the longitudinal axis.

Claim Rejections - 35 USC § 102

5. Claims 1, 3, 4, 7, 9, 10, 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Togashi et al. (6,929,196).

Togashi discloses a fuel injector comprising:

a seat 110;

a movable member 102;

an orifice plate including:

a member 111 including first and second generally parallel surfaces;

an orifice defined by a wall, the wall including:

a first portion 201;

a second portion 107.

6. Claims 1, 4, 7, 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Kurita et al. (6,131,827).

Kurita discloses a fuel injector comprising:

a seat 30;

a movable member 25;

an orifice plate including:

a member 100 including first and second generally parallel

surfaces;

an orifice defined by a wall, the wall including:

a first portion 100a;

a second portion 34.

Claim Rejections - 35 USC § 103

7. Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Togashi et al. (6,929,196) or Kurita et al. (6,131,827).

Togashi or Kurita discloses the claimed invention except for the first oblique angle and the second oblique angle ranges. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the first oblique angle between 25 and 30 degrees and the second oblique angle between 3 and 10 degrees, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Response to Arguments

8. Applicant's arguments filed September 5, 2007 have been fully considered but they are not persuasive.

Applicant argues that Togashi's groove 201 does not communicate with hole 107. It appears that applicant is giving the term "communicate with" a specific meaning. Claim limitations are given the broadest reasonable interpretation. Togashi's groove 201 communicates with hole 107 because fluid can flow from groove 201 to hole 107.

Applicant argues that Togashi does not have a perimeter defined by the cylinder wherein the perimeter is in a plane that is oblique with respect to the first surface. Claims 1 and 7 fail to limit the "perimeter" to the abutment of the first and second portions. Togashi's wall of orifice 107 has an infinite number of perimeters, at least one of which is in a plane that is oblique with respect to the first surface. Applicant raises the same issue with Kurita. Kurita's orifice 34 also has an infinite number of perimeters, at least one of which is in a plane that is oblique with respect to the first surface.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not


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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher S. Kim whose telephone number is (571) 272-4905. The examiner can normally be reached on Monday - Friday, 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Christopher S. Kim

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Primary Examiner
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